

**Listing of the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-9 (Canceled by this amendment).

Claim 10 (New): A surgical instrument for performing an anastomosis, comprising:

a housing;

an actuator attached to the housing for deforming at least one surgical fastener;

a firing safety mechanism including a spring having at least one mechanical interface which engages said housing, said spring configured to prevent distal movement of said actuator when disposed in an armed position; and

a safety release being selectively activatable to disarm said spring to allow activation of said actuator.

Claim 11 (New): A surgical instrument according to claim 10 wherein said spring is a leaf spring having a cut out defined therethrough, said cut out configured to prevent said actuator from firing when said leaf spring is disposed in an armed position.

Claim 12 (New): A surgical instrument according to claim 11 wherein said safety release includes a camming surface which, upon movement thereof, cams said cut out of said leaf spring out of engagement with said actuator.

Claim 13 (New): A surgical instrument according to claim 10 wherein said spring includes a hook-like member which secures said spring to said housing.

Claim 14 (New): A surgical instrument according to claim 10 wherein said safety release includes an upwardly extending contact surface which facilitates actuation of said safety release.

Claim 15 (New): A surgical instrument for performing an anastomosis, comprising:

a housing;

an actuator attached to the housing for deforming at least one surgical fastener, said actuator including a shoulder portion;

a firing safety mechanism including a lock spring having a body portion, a yoke defined through said body portion and at least one leaf spring, said lock spring configured to abut said shoulder of said actuator to prevent distal movement of said actuator through said yoke when said actuator disposed in an initial, pre-fired configuration; and

a safety release being selectively activatable to cam said lock spring out of engagement with said shoulder of said actuator to allow selective activation of said actuator through said yoke to deform said at least one surgical fastener.

Claim 16 (New): A surgical instrument according to claim 15 wherein said actuator is spring-biased to return to said initial, pre-fired configuration.

Claim 17 (New): A surgical instrument according to claim 16 wherein said at least one leaf spring of said lock spring forces said lock spring to reengage said shoulder of said actuator when said actuator returns to said initial, pre-fired configuration.